

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
Item #19 (Rev. 1)
ID #11997
ENERGY DIVISION
RESOLUTION E-4568
April 4, 2013

REDACTED

R E S O L U T I O N

Resolution E-4568. Pacific Gas and Electric requests approval of the Henrietta Solar power purchase agreement with Parrey, LLC, which is a wholly-owned subsidiary of SunPower, LLC.

PROPOSED OUTCOME: This Resolution approves cost recovery for the Henrietta Solar power purchase agreement between Pacific Gas and Electric and Parrey, LLC.

SAFETY CONSIDERATIONS: The Henrietta Solar power purchase agreement is between PG&E and Parrey, LLC. The Commission's jurisdiction extends only over PG&E, not Parrey, LLC. Based on the information before us, this PPA does not appear to result in any adverse safety impacts on the facilities or operations of PG&E.

ESTIMATED COST: Actual costs are confidential at this time.

By Advice Letter 4095-E filed on September 6, 2012.

SUMMARY

Cost recovery for Pacific Gas and Electric's renewable energy power purchase agreement (PPA) with Parrey, LLC for the Henrietta Solar facility is approved.

Pacific Gas and Electric (PG&E) filed Advice Letter 4095-E on September 6, 2012, requesting California Public Utilities Commission (CPUC) approval of a power purchase agreement (PPA) with Parrey, LLC (Parrey), a wholly-owned subsidiary of SunPower, LLC (SunPower). SunPower proposes to develop a 100 megawatt (MW) solar photovoltaic (PV) facility near Lemoore Station, CA. Forecasted annual generation of 244 gigawatt hours (GWh) is contracted to be

delivered from the Henrietta Solar facility over a 20-year term beginning on October 1, 2016.

The Henrietta Solar PPA was submitted as a bid during PG&E's 2011 Renewables Portfolio Standard (RPS) solicitation and then selected by PG&E for its shortlist. On August 15, 2012, PG&E and Parrey, LLC executed a contract for delivery of RPS-eligible energy from the Henrietta Solar facility. Subsequently, PG&E filed Advice Letter (AL) 4095-E on September 6, 2012 requesting CPUC approval of the Henrietta Solar PPA.

The CPUC approves cost recovery for the Henrietta Solar PPA between PG&E and Parrey, LLC. Cost recovery is being approved for three reasons. First, the price and value of the PPA compares favorably against shortlisted bids resulting from PG&E's 2011 RPS Solicitation. Second, the guaranteed commercial online date (GCOD) is October 1, 2016, which is in alignment with PG&E's RPS portfolio need. Third, the Henrietta Solar PPA has moderate to high viability. The Henrietta Solar PPA was given a high Project Viability Score by PG&E and it is likely that the facility will come online by the Guaranteed Commercial Online Date (GCOD).

The following table summarizes the project-specific features of the agreement:

Generating Facility	Type	Term Years	MW Capacity	Annual Deliveries	Online Date	Project Location
Henrietta	Solar PV	20	100	244 GWh	10/1/2016	Lemoore Station, CA

BACKGROUND

Overview of the Renewables Portfolio Standard (RPS) Program

The California (RPS) program was established by Senate Bill (SB) 1078, and has been subsequently modified by SB 107, SB 1036, and SB 2 (1X).¹ The RPS

¹ SB 1078 (Sher, Chapter 516, Statutes of 2002); SB 107 (Simitian, Chapter 464, Statutes of 2006); SB 1036 (Perata, Chapter 685, Statutes of 2007); SB 2 (1X) (Simitian, Chapter 1, Statutes of 2011, First Extraordinary Session).

program is codified in Public Utilities Code Sections 399.11-399.31.² Under SB 2 (1X), the RPS program administered by the Commission requires each retail seller to procure eligible renewable energy resources so that the amount of electricity generated from eligible renewable resources equals an average of 20 percent of the total electricity sold to retail customers in California for compliance period 2011-2013; 25 percent of retail sales by December 31, 2016; and 33 percent of retail sales by December 31, 2020.³

Additional background information about the Commission's RPS Program, including links to relevant laws and Commission decisions, is available at <http://www.cpuc.ca.gov/PUC/energy/Renewables/overview.htm> and <http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>.

NOTICE

Notice of Advice Letter 4095-E was made by publication in the Commission's Daily Calendar. PG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section 3.14 of General Order 96-B.

PROTESTS

PG&E's Advice Letter 4095-E was not protested.

DISCUSSION

Pacific Gas and Electric (PG&E) requests Commission approval of a renewable energy power purchase agreement (PPA) between PG&E and Parrey, LLC.

In July 2012, PG&E selected the most competitive shortlisted offers from its 2011 Renewables Portfolio Standard (RPS) bid solicitation for execution, including the Henrietta Solar PPA (Power Purchase Agreement). On August 15, 2012, PG&E and Parrey, LLC executed the Henrietta Solar PPA. PG&E filed Advice Letter (AL) 4095-E on September 6, 2012 seeking Commission approval of the PPA.

² All further references to sections refer to Public Utilities Code unless otherwise specified.

³ Decision (D.)11-12-020 established a methodology to calculate procurement requirement quantities for the three different compliance periods set forth in Section 399.15 (2011-2013, 2014-2016, and 2017-2020).

Parrey, LLC is a wholly-owned subsidiary of SunPower, LLC, a manufacturer of solar photovoltaic (PV) modules and developer of solar generation facilities. The 100 megawatt (MW) Henrietta Solar facility is proposed to deliver an estimated annual generation of 244 gigawatt hours (GWh) per year over a term of 20 years.

PG&E requests that the Commission issue a resolution that:

1. Approves the PPA in its entirety, including payments to be made by PG&E pursuant to the PPA, subject to the Commission's review of PG&E's administration of the PPA.
2. Finds that any procurement pursuant to the PPA is procurement from eligible renewable energy resources for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California RPS (Public Utilities Code Section 399.11 et seq.), D. 11-12-020 and D. 11-12-052, or other applicable law.
3. Finds that all procurement and administrative costs, as provided by Public Utilities Code section 399.13(g), associated with the PPA shall be recovered in rates.
4. Adopts the following finding of fact and conclusion of law in support of CPUC approval:
 - a. The PPA is consistent with PG&E's 2011 RPS procurement plan.
 - b. The terms of the PPA, including the price of delivered energy, is reasonable.
5. Adopts the following finding of fact and conclusion of law in support of cost recovery for the PPA:
 - a. The utility's costs under the PPA shall be recovered through PG&E's Energy Resource Recovery Account.
 - b. Any stranded cost that may arise from the PPA is subject to the provisions of D.04-12-048 that authorize recovery of stranded renewables procurement costs over the life of the contract. The implementation of the D. 04-12-048 stranded cost recovery mechanism is addressed in D.08-09-012.

6. Adopts the following findings with respect to resource compliance with the EPS adopted in R.06-04-009:
 - a. The PPA is not a form of covered procurement subject to the EPS, because the generating facility has an expected capacity factor of less than 60 percent and, therefore, is not baseload generation under paragraph 1(a)(ii) and 3(2)(a) of the adopted Interim EPS Rules.
7. Adopts a finding of fact and conclusion of law that deliveries from the PPA shall be categorized as procurement under the portfolio category specified in Section 399.16(b)(1)(A), subject to the Commission's after-the-fact verification that all applicable criteria have been met.

Energy Division Evaluated the PPA on these Grounds:

- Consistency with PG&E's 2011 RPS Procurement Plan
- Consistency with Least-Cost Best-Fit Requirements
- RPS Portfolio Need
- Price Reasonableness and Value
- Independent Evaluator (IE) Report
- Consistency with RPS Standard Terms and Conditions
- Procurement Review Group Participation
- Contribution to Minimum Long Term Contracting Requirement
- Compliance with the Interim Greenhouse Gas Emissions Performance Standard

Consistency with PG&E's 2011 RPS Procurement Plan

California's RPS statute requires the Commission to direct each utility to prepare a Renewable Energy Procurement Plan (Plan) and then review and accept, modify, or reject the Plan prior to the commencement of a utility's annual RPS solicitation.⁴ The Commission must then accept or reject proposed PPAs based on their consistency with the utility's approved Plan. The Henrietta Solar PPA was

⁴ § 399.13.

shortlisted and later executed as a result of PG&E's 2011 RPS Solicitation, which was approved in PG&E's 2011 RPS Plan. Therefore, the Henrietta Solar PPA is being evaluated for its consistency with PG&E's 2011 RPS Plan. PG&E's stated preferences in its 2011 RPS Plan include: 1) projects that allow it to address its long-term 33% RPS mandate under the third compliance period (CP3) from 2017-2020, and 2) projects with high viability.

The GCOD of the Henrietta Solar facility is October 1, 2016, which is shortly before the beginning of CP3. RPS deliveries from the Henrietta Solar facility align with PG&E's stated need for RPS-eligible generation in CP3. Any surplus RPS-eligible generation from the Henrietta Solar facility purchased by PG&E during the last few months of 2016 can be banked and applied during future compliance periods or sold.

PG&E scored the Henrietta Solar PPA as highly viable using the project viability calculator because the project has achieved important project development milestones. The Independent Evaluator (IE) also commented that the Henrietta Solar facility should be interconnected to the grid in time for the GCOD, confirming the project's viability. See Confidential Appendix A for more details on the Henrietta Solar PPA's viability.

The Henrietta Solar PPA is consistent with PG&E's 2011 RPS Procurement Plan approved by D.11-04-030.

Consistency with PG&E's Least-Cost Best-Fit (LCBF) Requirements

The basic components of PG&E's LCBF evaluation and selection criteria and process for RPS PPAs were established in the Commission's LCBF Decisions D.03-06-071 and D.04-07-029. Consistent with these decisions, the five main LCBF evaluation steps undertaken by PG&E are: (1) determination of market value of bid; (2) evaluation of portfolio fit; (3) evaluation of project viability; (4) consistency with RPS goals and; (5) calculation of transmission adders. The LCBF decision directs the utilities to use certain criteria in their bid ranking.⁵ The decision offers guidance regarding the process by which the utility ranks bids in order to select or "shortlist" the bids with which it will commence negotiations. PG&E's bid evaluation includes a quantitative and qualitative analysis, and also

⁵ See D.04-07-029.

analyzes each proposal's absolute value to PG&E's customers and relative value in comparison to other proposals.

In AL 4095-E, PG&E evaluated the reasonableness of the finalized Henrietta Solar PPA against proposals that PG&E received in its 2011 RPS Solicitation and RPS contracts executed by PG&E in the last 12 months. When compared against these cohorts, the Henrietta Solar PPA compares favorably on price, value, and need. See Confidential Appendix A for more details.

PG&E adequately examined the reasonableness of the Henrietta Solar PPA utilizing its LCBF methodology that was in place during the time the PPA was being negotiated and executed.

RPS Portfolio Need

The California RPS Program was established by Senate Bill (SB) 1078 and has been recently modified by SB 2 (1X), which became effective on December 10, 2011. SB 2 (1X) made significant changes to the RPS Program.⁶ SB2 (1X) established new RPS procurement targets such that retail sellers must procure "...from January 1, 2011 to December 31, 2013...an average of 20 percent of retail sales...25 percent of retail sales by December 31, 2016, and 33 percent of retail sales by December 31, 2020."⁷

PG&E's RPS portfolio need falls within CP3 (2017-2020). The October 1, 2016 GCOD of the Henrietta Solar PPA is prior to PG&E's stated need. In order for the Henrietta Solar facility to be eligible for the Federal Investment Tax Credit, it must begin delivering before the end of 2016. That being said, surplus RPS deliveries from the Henrietta Solar facility generated at the end of 2016 can be banked by PG&E for future RPS compliance or sold. All RPS deliveries from the Henrietta Solar facility after January 1, 2017 align with PG&E's stated need in CP3. See Confidential Appendix A for more details.

The Commission finds that generation from the Henrietta Solar PPA fits the portfolio need requirements of PG&E's RPS portfolio.

⁶ The Commission opened Rulemaking (R.) 11-05-005 (May 5, 2011) to implement the new RPS law.

⁷ See § 399.15(b)(2)(B), SB 2 (1X).

Price Reasonableness and Value

The most recent cohorts to compare the Henrietta Solar PPA's price and value against are shortlisted bids from PG&E's 2011 RPS solicitation and RPS contracts executed by PG&E in the 12 months prior to the execution of the Henrietta Solar PPA. The PPA was executed on August 15, 2012 and submitted to the Commission for approval on September 5, 2012.

PG&E evaluated the attributes of each PPA bid both quantitatively and qualitatively in order to rank them for their shortlist based on NMV, and then applied a secondary ranking using portfolio adjusted value (PAV)⁸. The Henrietta Solar PPA compared favorably against other offers based on price, non-price factors and portfolio fit using the NMV methodology. See Confidential Appendix A for a price and value comparison.

The price and net market value of the Henrietta Solar PPA are reasonable compared to shortlisted projects resulting from PG&E's 2011 RPS Solicitation and RPS contracts recently executed by PG&E.

The CPUC approves cost recovery for the Henrietta Solar PPA between PG&E and Parrey, LLC.

Independent Evaluator Report

PG&E used Arroyo Seco Consulting (Arroyo) as the Independent Evaluator for the PPA. Arroyo compared the NMV of the Henrietta Solar PPA to peer groups of previously and currently offered competing sources of RPS-eligible energy, using both PG&E's and Arroyo's independent analysis. Based on those comparisons, Arroyo opines that the NMV of the contract ranks as high and the contract price ranks as low when compared to relevant peer groups of competing proposals.

Arroyo ranked the Henrietta Solar PPA as only moderately viable due to concerns surrounding transmission network upgrades necessary for the project to come online by the GCOD and achieve ITC benefits. However, even if the network upgrades require four years, the outer range of the estimate for

⁸ The Portfolio Adjusted Value methodology uses the Net Market Value results as an initial valuation and then makes additional adjustments that take into account the impact a transaction will have on PG&E's portfolio, many of which are elements of portfolio fit.

completion, the IE believes that it's likely that the project would be interconnected to the grid in time for the GCOD. See Confidential Appendix B for a detailed explanation of the IE's findings.

Consistent with D.06-05-039, an independent evaluator oversaw PG&E's RPS procurement process. Additionally, an independent evaluator oversaw PG&E's negotiations with Parrey, LLC and compared the costs, value and viability of the Henrietta Solar PPA to peer groups consisting of alternative competing proposals currently or recently available to PG&E.

The independent evaluator recommends that the Commission approve the Henrietta Solar PPA.

Consistency with RPS Standard Terms and Conditions

The Commission adopted a set of standard terms and conditions (STCs) required in RPS PPAs, four of which are considered "non-modifiable." The STCs were compiled in D.08-04-009 and subsequently amended in D.08-08-028. The Commission further refined these STCs in D.10-03-021, as modified by D.11-01-025.

The Henrietta Solar PPA includes the Commission-adopted RPS "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.

Procurement Review Group Participation

The Procurement Review Group (PRG) process was initially established in D.02-08-071 as an advisory group of non-market participants to review and assess the details of the investor-owned utilities' overall procurement strategy, solicitations, specific proposed procurement contracts and other procurement processes prior to submitting filings to the Commission as an interim mechanism for procurement review.

According to PG&E, participants in its PRG included representatives from the Commission's Energy Division and the Division of Ratepayer Advocates, the Department of Water Resources, the Union of Concerned Scientists, the Utility Reform Network, the California Utility Employees, and Jan Reid, as a PG&E ratepayer. The Henrietta Solar PPA was presented to the PRG as a potential contract for execution on June 19, 2012.

Pursuant to D.02-08-071, PG&E complied with the Commission's rules for involving the Procurement Review Group.

Contribution to Minimum Quantity Requirement for Long-Term PPAs

Section 399.13(b) requires that the commission establish "minimum quantities of eligible renewable energy resources to be procured through contracts of at least 10 years' duration." The Commission established the minimum quantity requirements in D.12-06-038.

Because the term of the Henrietta Solar PPA is greater than 10 years in length, the PPA may be construed as counting toward the minimum quantity requirements that the Commission established in D.12-06-038.

Compliance with the Interim Greenhouse Gas Emissions Performance Standard (EPS)

California Public Utilities Code Sections 8340 and 8341 require the Commission to consider emissions associated with new long-term (five years or greater) PPAs procured on behalf of California ratepayers.

D.07-01-039 adopted an interim EPS that establishes an emission rate for obligated facilities at levels no greater than the greenhouse gas (GHG) emissions of a combined-cycle gas turbine power plant. The EPS applies to all energy PPAs for baseload generation that are at least five years in duration.⁹ Generating facilities using certain renewable resources, including geothermal energy, are deemed compliant with the EPS.¹⁰

The Henrietta Solar facility is not baseload generation and therefore the EPS does not apply to this PPA.

⁹ "Baseload generation" is electricity generation at a power plant "designed and intended to provide electricity at an annualized plant capacity factor of at least 60%." Pub. Util. Code § 8340 (a).

¹⁰ D.07-01-039, Attachment 7, p. 4

RPS ELIGIBILITY AND CPUC APPROVAL

Pursuant to Public Utilities Code Section 399.13, the CEC certifies eligible renewable energy resources. Generation from a resource that is not CEC-certified cannot be used to meet RPS requirements. To ensure that only CEC-certified energy is procured under a Commission-approved RPS PPA, the Commission has required standard and non-modifiable “eligibility” language in all RPS PPAs. That language requires a seller to warrant that the project qualifies and is certified by the CEC as an “Eligible Renewable Energy Resource,” that the project’s output delivered to the buyer qualifies under the requirements of the California RPS, and that the seller uses commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.¹¹

The Commission requires a standard and non-modifiable clause in all RPS PPAs that requires “CPUC Approval” of a PPA to include an explicit finding that “any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), D.11-12-020 and D.11-12-052, or other applicable law.”¹²

Notwithstanding this language, the Commission has no jurisdiction to determine whether a project is not an eligible renewable energy resource, nor can the Commission determine prior to final CEC certification of a project, that “any procurement” pursuant to a specific contract will be “procurement from an eligible renewable energy resource.”

Therefore, while we include the required finding here, this finding has never been intended, and shall not be read now, to allow the generation from a non-RPS-eligible resource to count towards an RPS compliance obligation. Nor shall such finding absolve the seller of its obligation to obtain CEC certification, or the utility of its obligation to pursue remedies for breach of contract. Such contract enforcement activities shall be reviewed pursuant to the Commission’s authority to review the utilities’ administration of such contracts.

¹¹ See, e.g. D. 08-04-009 at Appendix A, STC 6, Eligibility.

¹² See, e.g. D. 08-04-009 at Appendix A, STC 1, CPUC Approval.

CONFIDENTIAL INFORMATION

The Commission, in implementing Public Utilities Code Section 454.5(g), has determined in D.06-06-066, as modified by D.07-05-032, that certain material submitted to the Commission as confidential should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations. D.06-06-066 adopted a time limit on the confidentiality of specific terms in RPS PPAs. Such information, including price, is confidential for three years from the date the contract states that energy deliveries begin, except contracts between IOUs and their affiliates, which are public.

The confidential appendices, marked “[REDACTED]” in the public copy of this resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.

COMMENTS

This is an uncontested matter in which the resolution grants the relief requested. Accordingly, pursuant to Public Utilities Code § 311(g)(2), the otherwise applicable 30-day period for public review and comment is being waived.

FINDINGS AND CONCLUSIONS

1. The Henrietta Solar PPA is consistent with PG&E’s 2011 RPS Procurement Plan approved by D.11-04-030.
2. PG&E adequately examined the reasonableness of the Henrietta Solar PPA utilizing its LCBF methodology that was in place during the time the PPA was being negotiated and executed.
3. The Commission finds that generation from the Henrietta Solar PPA fits the portfolio need requirements of PG&E’s RPS portfolio.
4. The price and net market value of the Henrietta Solar PPA are reasonable compared to shortlisted projects resulting from PG&E’s 2011 RPS Solicitation and RPS contracts recently executed by PG&E.
5. The Henrietta Solar PPA includes the Commission-adopted RPS “non-modifiable” standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.

6. Pursuant to D.02-08-071, PG&E complied with the Commission's rules for involving the Procurement Review Group.
7. Because the term of the Henrietta Solar PPA is greater than 10 years in length, the PPA may be construed as counting toward the minimum quantity requirements that the Commission established in D.12-06-038.
8. The Henrietta Solar facility is not baseload generation and therefore the EPS does not apply to this PPA.
9. Procurement pursuant to the Henrietta Solar PPA is procurement from an eligible renewable energy resource for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), D.11-12-020 and D.11-12-052, or other applicable law.
10. The immediately preceding finding shall not be read to allow generation from a non-RPS eligible renewable energy resource under the PPA to count towards an RPS compliance obligation. Nor shall that finding absolve PG&E of its obligation to enforce compliance with the Henrietta Solar PPA.
11. The confidential appendices, marked "[REDACTED]" in the public copy of this resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.
12. The Henrietta Solar PPA should be approved in its entirety.
13. Advice Letter 4095-E should be approved effective today without modification.
14. Payments made by PG&E under the Henrietta Solar PPA are fully recoverable in rates over the life of the PPA, subject to Commission review of PG&E's administration of the PPA.

THEREFORE IT IS ORDERED THAT:

1. The power purchase agreement between Pacific Gas and Electric and Parrey, LLC as proposed in Advice Letter 4095-E is approved without modifications.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on April 4, 2013; the following Commissioners voting favorably thereon:

PAUL CLANON
Executive Director

Confidential Appendix A

Least-Cost Best-Fit, Portfolio Need, and Project
Viability

[REDACTED]

Confidential Appendix B

Independent Evaluator Conclusions and Recommendations

[REDACTED]

Confidential Appendix C

PPA Terms and Conditions

[REDACTED]